

Processor Installation and Replacement Procedure

For the HP cc3310 Carrier Grade Server



Manufacturing Part Number: A9870-90001

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Edition 2
E0803

Instructions:

These instructions inform users of cc3310 systems of the processor installation and replacement /transfer procedures.

IMPORTANT NOTE: The systems Sensor Data Records (SDR) must be reprogrammed every time the hardware configuration changes (any changes to memory, processors, power supplies, power cage, hot swap back plane, controller boards, or any hardware devices or Field Replaceable Units). Failure to reprogram the SDR may allow critical system failures to occur without an appropriate Telco alarm.

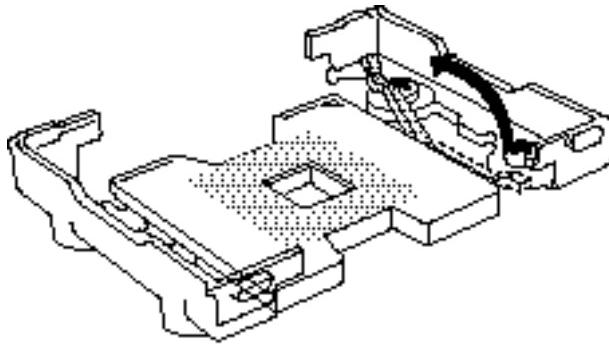
Use the following procedure to re-write the SDR once the configuration change has been installed:

1. Boot the system using the “cc3310 Diagnostic and Utilities Resource CD”.
2. Once the CD has booted, select “Load Configuration Wizard”.
3. When the Wizard on the Resource CD begins, Press continue.
4. Select “Server Configuration Wizard” and Continue.
4. Select “run wizard” and continue.
5. Select only the “Load SDR’s only on to this server” and continue.
6. Set the “date and time” and continue.
7. Select “update just the SDR repository” and continue.
8. Select “Yes - Activate BMC TAM” and continue.
9. Choose any LED configuration you want and continue.
10. Save the server configuration to disk if you desire and continue.
11. Press “OK to program the SDRs”. The server will reboot when the SDR repository is reprogrammed.

Installing Processors

1. Raise the locking bar on the socket.

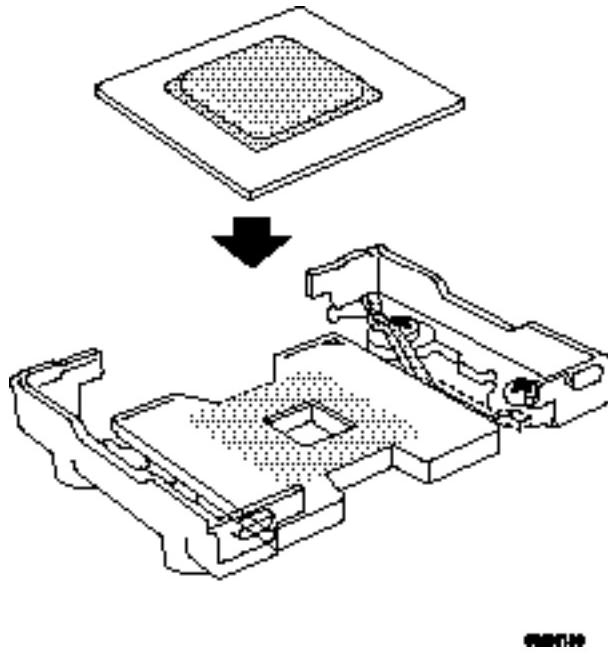
Figure A Raising the Locking Bar



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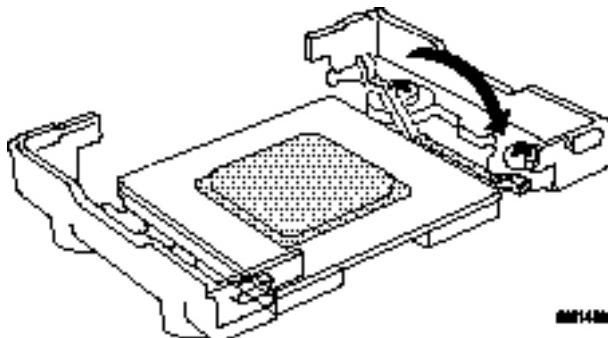
2. Aligning the pins of the processor with the socket, insert the processor into the socket. Note the triangle locator on the socket and the processor chip for proper orientation.

Figure B **Installing Processors**



3. Lower the locking bar completely.

Figure C **Lowering the Locking Bar**

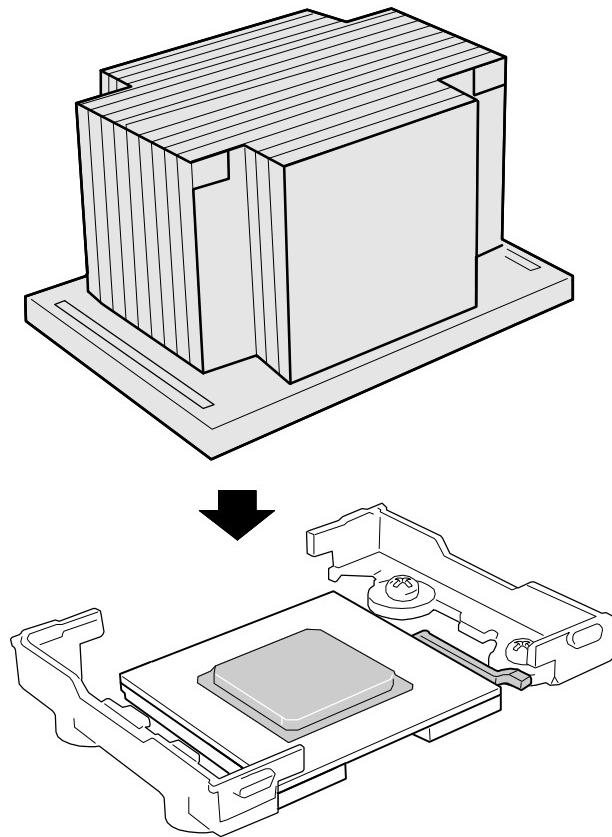


4. Position the heat sink above the processor ensuring that the black THERMAL PAD (adhered to the bottom of the heat sink) is positioned directly over the processor.

NOTE: Handle the heat sink with extreme care to avoid damaging the cooling fins and scratching the black THERMAL PAD on the bottom of the heat sink.

5. Aligning the raised metal surfaces, place the heat sink on top of the processor.

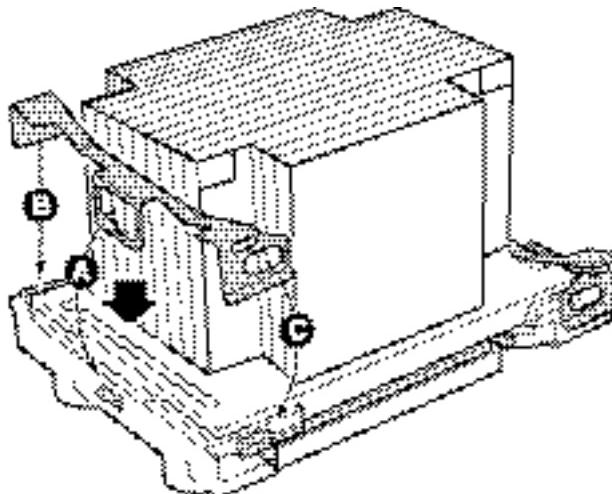
Figure D **Installing the Heat Sink**



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6. Place the heat sink clip so the tab on the clip engages the slot on the heat sink. Position the clip so that the plastic tab on the retaining bracket is located in the narrow portion of the heat sink clip opening. (**See A in Figure E**)
7. Press one end of the clip down until it locks into position with the retainer block tab. The black plastic tab should protrude through the opening in end of the heat sink clip. Some slight sideways movement of the clip may be necessary to achieve proper installation. (**See B in Figure E**)
8. Press the other end of the clip down until it locks in position with the retainer block tab. Again some slight sideways movement of the clip may be necessary to achieve proper installation. (**See C in Figure E**)
9. Reassemble the system after these steps are done. At this point, power can be reapplied to the system. Be sure to reprogram the SDR, as detailed in the “Important Note” at the beginning of this procedure.

Figure E **Installing the Heat Sink Clip**



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Replacing/Transferring a Processor

Use this procedure for replacing a defective processor, or for transferring processor(s) from a defective chassis to a replacement chassis.

1. Observe the safety and ESD precautions at the beginning of this chapter and the additional cautions given here.
2. Removing the fan assembly will make processor removal/installation much easier to accomplish. (Disconnect 4 FAN power connectors from the FPIO board, and loosen the captive fan retaining screw until the fan assembly can be removed.)
3. Using a slot screwdriver, disengage the retention clip from the processor socket. One end of the retention clip has an extended tab for the screwdriver blade to fit into. While pressing down on the heat sink clip with the screwdriver, pry this end of the heat sink clip off of the retaining bracket. (**See Figure F**) This end of the retention clip will pop off the retention mechanism bracket. Remove the opposite end of the clip by pressing down on the clip and sliding it off of the retaining bracket. Repeat the process for the remaining clip. Discard the retention clips. Use the new clips provided with the Processor replacement kit..
4. Once the retention clips are free, lift the heat sink upward off the retention mechanism brackets. Discard the heat sink. A new heat sink is provided with the Processor replacement kit.

NOTE: Handle the heat sink with extreme care to avoid damaging the cooling fins and scratching the black THERMAL PAD on the bottom of the heat sink.

5. Raise the locking bar on the socket (**See Figure A**).
6. Remove the old processor from the socket.

7. Aligning the pins of the replacement processor with the socket, insert the replacement processor into the socket (**See Figure B**).
8. Lower the locking bar completely (**See Figure C**).
9. Follow the instructions packaged with your boxed processor for preparing the heat sink and processor for installation.
10. Position the heat sink above the processor while ensuring that the black THERMAL PAD is positioned directly over the processor.
11. Aligning the raised metal surfaces, place the heat sink on top of the processor.
12. Place the heat sink clip so the tab on the clip engages the slot on the heat sink (**See A in Figure E**). Position the clip so that the plastic tab on the retaining bracket is located in the narrow portion of the heat sink clip opening.
13. Press one end of the clip down (**See B in Figure E**).
14. Press the other end of the clip down (**See C in Figure E**).

Figure F
Socket

Disengaging the Retention Clips from the Processor

